



**NEW ENGLAND  
COMMON ASSESSMENT PROGRAM**

**Released Items  
2007**

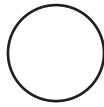
**Grade 3  
Mathematics**

# Mathematics



Item selected from Session One—no calculators or other mathematics tools allowed.

- 1 Look at this circle.



Which picture shows this circle divided into fourths?

- ☐ A.
- ☐ B.
- ☐ C.
- ☐ D.



- 2 Which number sentence is true?

- ☐ A.  $16 + 8 = 6 + 8$
- ☐ B.  $12 + 6 = 9 + 9$
- ☐ C.  $5 + 9 = 12 + 4$
- ☐ D.  $11 + 7 = 18 + 1$

- 3 This chart shows the number of pennies three students saved.

**Pennies Saved**

Student	Number of Pennies
Joan	106
Harry	143
Marla	94

Which list shows the students in order from the student who saved the **fewest** pennies to the student who saved the **most** pennies?

- ☐ A. Marla, Joan, Harry
- ☐ B. Harry, Marla, Joan
- ☐ C. Joan, Harry, Marla
- ☐ D. Marla, Harry, Joan



- 4 Rico had 26 grapes. Then he ate some of his grapes. Now Rico has 9 grapes. How many grapes did Rico eat?

- ☐ A. 13
- ☐ B. 15
- ☐ C. 16
- ☐ D. 17

- 5 Look at Anne's coins and Lynn's coins.

### Anne's Coins



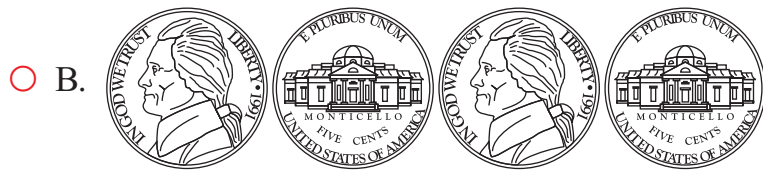
### Lynn's Coins



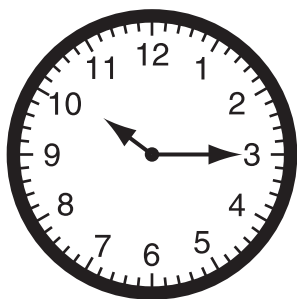
How much more money does Anne have than Lynn?

- ☐ A. \$0.21
- ☐ B. \$0.31
- ☐ C. \$0.36
- ☐ D. \$0.40

6 Which set of coins has the same value as 20 pennies?



- 7 Look at this clock.



What time does the clock show?

- ☐ A. 3:10
- ☐ B. 10:03
- ☐ C. 10:15
- ☐ D. 11:15

- 8 Juan circled numbers on this chart to make a number pattern.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

What is the next number Juan should circle to continue his pattern?

- ☐ A. 42
- ☐ B. 45
- ☐ C. 46
- ☐ D. 50

- 9 Look at this number sentence.

$$\begin{array}{r} 14 \\ + \square \\ \hline 24 \end{array}$$

What number makes this number sentence true?

- ☐ A. 10
- ☐ B. 20
- ☐ C. 24
- ☐ D. 38

- 10 This chart shows the types of books some students like best.



**Favorite Types of Books**

Type of Book	Number of Students
Animal	11
Sports	7
People	5
Science	9

How many more students like animal books than people books?

- ☐ A. 5
- ☐ B. 6
- ☐ C. 11
- ☐ D. 16

- 11 Look at these shapes and their values.

Shape	Value
	100
	10
X	1

Use each shape at least one time to show the number one hundred forty-five.



- 12 Matt had 5 marbles. Then Renee gave him some marbles. Now Matt has 14 marbles.

Write a number sentence to show how many marbles Renee gave Matt.

- 13 This table shows the number of vans needed to take students on a camping trip.

Number of Vans	Number of Students
2	14
3	21
4	28
5	?
6	42

Each van takes the same number of students. How many students can 5 vans take on the camping trip?



- 14 The chart below shows the game scores for Paula, Cory, and Teresa.

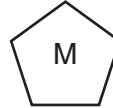
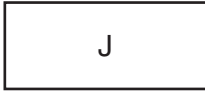
**Game Scores**

<b>Name</b>	<b>Game 1</b>	<b>Game 2</b>	<b>Game 3</b>	<b>Total Score</b>
Paula	4	6	8	18
Cory	9	5	5	
Teresa	5	7		

- a. What is Cory's total score?
- b. Teresa's **total** score was greatest. What is the lowest score Teresa could have for **game 3**?



- 15 Look at these shapes.













- a. Sort these shapes into two sets. Put the letters or draw the shapes in the chart below.

Set 1	Set 2

- b. Use math words to tell how you sorted the shapes.

- 16 Look at this pictograph.

### Dogs at the Park

Type of Dog	Number of Dogs
Beagle	 
Collie	  
Poodle	
Dalmatian	   

**Key**  
 represents 1 dog

- a. Write a word problem that can be answered using the information in this pictograph.
- b. Answer the word problem you wrote.

## Grade 3 Mathematics Released Item Information

Released Item Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
No Tools Allowed		✓		✓								✓		✓		
Content Strand <sup>1</sup>	NO	NO	NO	NO	NO	NO	GM	FA	FA	DP	NO	NO	FA	NO	GM	DP
GLE Code	2-1	2-1	2-2	2-3	2-5	2-5	2-7	2-1	2-4	2-2	2-1	2-3	2-1	2-2	2-1	2-1
Depth of Knowledge Code	1	2	2	1	2	1	1	2	1	2	2	2	2	3	2	3
Item Type <sup>2</sup>	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	SA	SA	SA	SA	SA	SA
Answer Key	D	B	A	D	B	B	C	B	A	B						
Total Possible Points	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2

<sup>1</sup>Content Strand: NO = Numbers & Operations, GM = Geometry & Measurement, FA = Functions & Algebra,  
DP = Data, Statistics, & Probability

<sup>2</sup>Item Type: MC = Multiple Choice, SA = Short Answer



**NEW ENGLAND  
COMMON ASSESSMENT PROGRAM**

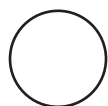
**Released Items  
Support Materials  
2007**

**Grade 3  
Mathematics**

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

**N&O 2.1** Demonstrates conceptual understanding of rational numbers with respect to: whole numbers from 0 to 199 using place value, by applying the concepts of equivalency in composing or decomposing numbers (e.g.,  $34 = 17 + 17$ ;  $34 = 29 + 5$ ); and in expanded notation (e.g.,  $141 = 1 \text{ hundred} + 4 \text{ tens} + 1 \text{ one}$  or  $141 = 100 + 40 + 1$ ) using models, explanations, or other representations; and positive fractional numbers (benchmark fractions:  $a/2$ ,  $a/3$ , or  $a/4$ , where  $a$  is a whole number greater than 0 and less than or equal to the denominator) as a part to whole relationship in area and set models where the denominator is equal to the number of parts in the whole using models, explanations, or other representations.

1 Look at this circle.



Which picture shows this circle divided into fourths?



NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

**N&O 2.1** Demonstrates conceptual understanding of rational numbers with respect to: whole numbers from 0 to 199 using place value, by applying the concepts of equivalency in composing or decomposing numbers (e.g.,  $34 = 17 + 17$ ;  $34 = 29 + 5$ ); and in expanded notation (e.g.,  $141 = 1 \text{ hundred} + 4 \text{ tens} + 1 \text{ one}$  or  $141 = 100 + 40 + 1$ ) **using models, explanations, or other representations**; and **positive fractional numbers** (benchmark fractions:  $a/2$ ,  $a/3$ , or  $a/4$ , where  $a$  is a whole number greater than 0 and less than or equal to the denominator) as a part to whole relationship in area and set models where the denominator is equal to the number of parts in the whole **using models, explanations, or other representations**.



2 Which number sentence is true?

- ☐ A.  $16 + 8 = 6 + 8$
- ☐ B.  $12 + 6 = 9 + 9$
- ☐ C.  $5 + 9 = 12 + 4$
- ☐ D.  $11 + 7 = 18 + 1$

**NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH**

**N&O 2.2** Demonstrates understanding of the relative magnitude of numbers from 0 to 199 by ordering whole numbers; by comparing whole numbers to each other or to benchmark whole numbers (10, 25, 50, 75, 100, 125, 150, or 175); by demonstrating an understanding of the relation of inequality when comparing whole numbers by using “1 more”, “1 less”, “10 more”, “10 less”, “100 more”, or “100 less”; or by connecting number words and numerals to the quantities they represent using models, number lines, or explanations.

- 3 This chart shows the number of pennies three students saved.

**Pennies Saved**

Student	Number of Pennies
Joan	106
Harry	143
Marla	94

Which list shows the students in order from the student who saved the **fewest** pennies to the student who saved the **most** pennies?

- ☐ A. Marla, Joan, Harry
- ☐ B. Harry, Marla, Joan
- ☐ C. Joan, Harry, Marla
- ☐ D. Marla, Harry, Joan

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

**N&O 2.3** Demonstrates conceptual understanding of mathematical operations involving addition and subtraction of whole numbers by solving problems involving joining actions, separating actions, part-part whole relationships, and comparison situations; and addition of multiple one-digit whole numbers.



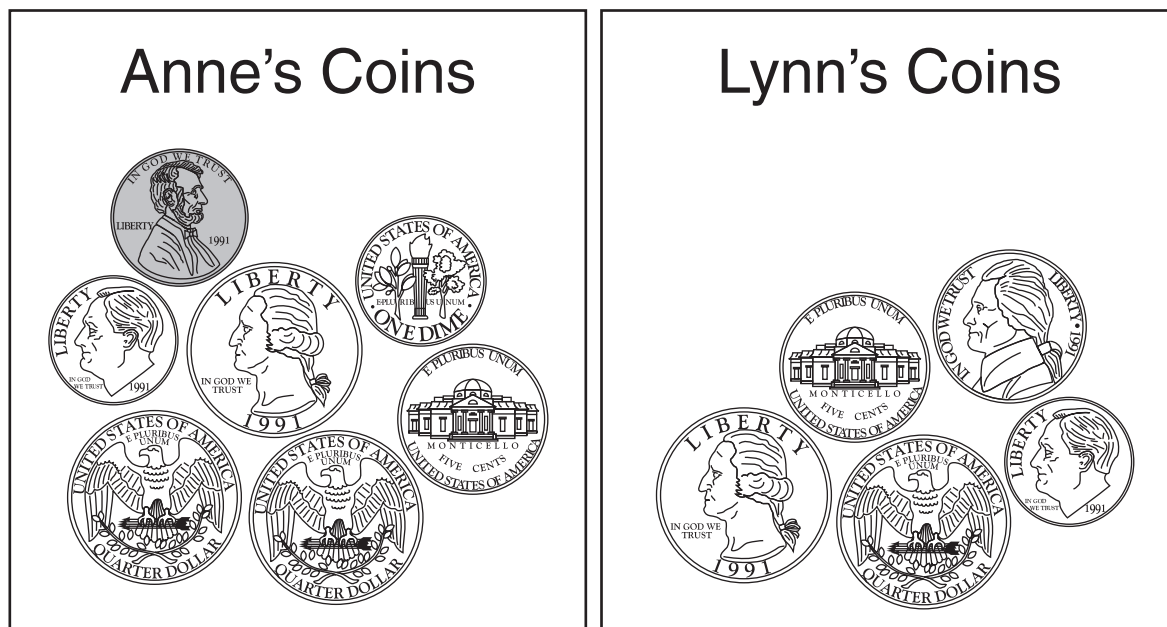
- 4 Rico had 26 grapes. Then he ate some of his grapes. Now Rico has 9 grapes. How many grapes did Rico eat?
- ☐ A. 13
  - ☐ B. 15
  - ☐ C. 16
  - ☐ D. 17



NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

**N&O 2.5** Demonstrates understanding of monetary value by adding coins together to a value no greater than \$1.99 and representing the result in dollar notation; making change from \$1.00 or less, or recognizing equivalent coin representations of the same value (values up to \$1.99).

- 5 Look at Anne's coins and Lynn's coins.



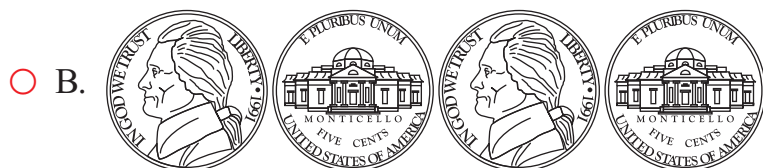
How much more money does Anne have than Lynn?

- ☐ A. \$0.21
- ☐ B. \$0.31
- ☐ C. \$0.36
- ☐ D. \$0.40

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

**N&O 2.5** Demonstrates understanding of monetary value by adding coins together to a value no greater than \$1.99 and representing the result in dollar notation; making change from \$1.00 or less, or recognizing equivalent coin representations of the same value (values up to \$1.99).

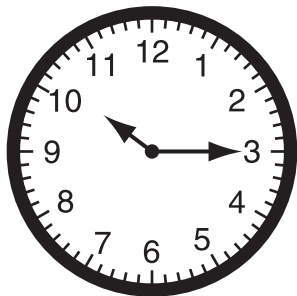
**6** Which set of coins has the same value as 20 pennies?



NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

**G&M 2.7** Measures and uses units of measures appropriately and consistently, and makes conversions within systems when solving problems across the content strands.

- 7 Look at this clock.



What time does the clock show?

- ☐ A. 3:10
- ☐ B. 10:03
- ☐ C. 10:15
- ☐ D. 11:15

**NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH**

**F&A 2.1** Identifies and extends to specific cases a variety of patterns (linear and non-numeric) represented in models, tables, or sequences by extending the pattern to the next element, or finding a missing element (e.g., 2, 4, 6, \_\_\_\_, 10).

- 8** Juan circled numbers on this chart to make a number pattern.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

What is the next number Juan should circle to continue his pattern?

- ☐ A. 42
- ☐ B. 45
- ☐ C. 46
- ☐ D. 50

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

**F&A 2.4** Demonstrates conceptual understanding of equality by finding the value that will make an open sentence true (e.g.,  $2 + \square = 7$ ). (limited to one operation and limited to use addition or subtraction)

- 9 Look at this number sentence.

$$\begin{array}{r} 14 \\ + \square \\ \hline 24 \end{array}$$

What number makes this number sentence true?

- ☐ A. 10  
☐ B. 20  
☐ C. 24  
☐ D. 38

**DSP 2.2** Analyzes patterns, trends, or distributions in data in a variety of contexts by determining or using more, less, or equal.

- 10 This chart shows the types of books some students like best.

**Favorite Types of Books**

Type of Book	Number of Students
Animal	11
Sports	7
People	5
Science	9




How many more students like animal books than people books?

- ☐ A. 5  
☐ B. 6  
☐ C. 11  
☐ D. 16

**NECAP 2007 RELEASED ITEMS**  
**GRADE 3 MATH**

**N&O 2.1 Demonstrates conceptual understanding of rational numbers with respect to: whole numbers** from 0 to 199 using place value, by applying the concepts of equivalency in composing or decomposing numbers (e.g.,  $34 = 17 + 17$ ;  $34 = 29 + 5$ ); and in expanded notation (e.g.,  $141 = 1 \text{ hundred} + 4 \text{ tens} + 1 \text{ one}$  or  $141 = 100 + 40 + 1$ ) **using models, explanations, or other representations; and positive fractional numbers** (benchmark fractions:  $a/2$ ,  $a/3$ , or  $a/4$ , where  $a$  is a whole number greater than 0 and less than or equal to the denominator) as a part to whole relationship in area and set models where the denominator is equal to the number of parts in the whole **using models, explanations, or other representations.**

- 11** Look at these shapes and their values.

Shape	Value
	100
	10
	1

**Use each shape at least one time** to show the number one hundred forty-five.

## Scoring Guide

Score	Description
1	Student draws a correct model for 145.
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response

### Sample Responses:

□ |||| xxxxx

OR

XXXXXXXXXXXXXXXXXXXX

OR

XX



OR

☐ XXX

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 1  
(EXAMPLE A)

- 11 Look at these shapes and their values.

Shape	Value
	100
	10
X	1

Use each shape at least one time to show the number one hundred forty-five.





Student's response is correct.

Even though the symbol used to represent the value 10 is slightly different from the symbol used in the table, the intent is clear.

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 1  
(EXAMPLE B)

- 11 Look at these shapes and their values.

Shape	Value
	100
	10
X	1

Use each shape at least one time to show the number one hundred forty-five.

X  | X | X | X | X | X



Student's response is correct.



NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 0  
(EXAMPLE A)

- 11 Look at these shapes and their values.

Shape	Value
	100
	10
X	1

Use each shape at least one time to show the number one hundred forty-five.



$$100 + 10 + 10 + 1 + 1 + 1 + 1 + 1 + 10 + 10 = 145$$

Student did not use each shape at least once to show the number.

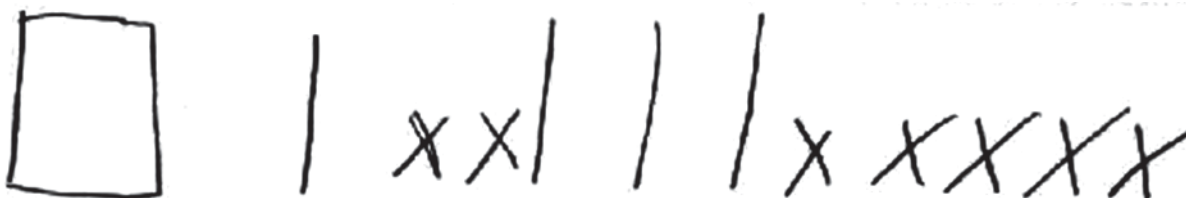
NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 0  
(EXAMPLE B)

- 11 Look at these shapes and their values.

Shape	Value
	100
	10
X	1

Use each shape at least one time to show the number one hundred forty-five.



Student's response is incorrect.

**NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH**

**N&O 2.3 Demonstrates conceptual understanding of mathematical operations involving** addition and subtraction of whole numbers by solving problems involving joining actions, separating actions, part-part whole relationships, and comparison situations; and addition of multiple one-digit whole numbers.



- 12** Matt had 5 marbles. Then Renee gave him some marbles. Now Matt has 14 marbles.

Write a number sentence to show how many marbles Renee gave Matt.

**Scoring Guide**

Score	Description
1	Student writes <b><math>14 - 5 = 9</math>, or <math>5 + 9 = 14</math>, or an equivalent number sentence.</b>
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 1  
(EXAMPLE A)



- 12 Matt had 5 marbles. Then Renee gave him some marbles. Now Matt has 14 marbles.

Write a number sentence to show how many marbles Renee gave Matt.

9 marbles  $5 + 9 = 14$   
I counted in my head

Student's response is correct.  
(An explanation is not required.)

SCORE POINT 1  
(EXAMPLE B)



- 12 Matt had 5 marbles. Then Renee gave him some marbles. Now Matt has 14 marbles.

Write a number sentence to show how many marbles Renee gave Matt.

$$14 - 5 = 9$$

Student's response is correct.

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 0  
(EXAMPLE A)



- 12 Matt had 5 marbles. Then Renee gave him some marbles. Now Matt has 14 marbles.

Write a number sentence to show how many marbles Renee gave Matt.

9 marbles

Student did not write a number sentence.

SCORE POINT 0  
(EXAMPLE B)



- 12 Matt had 5 marbles. Then Renee gave him some marbles. Now Matt has 14 marbles.

Write a number sentence to show how many marbles Renee gave Matt.

$5 + 14 = 19$

Student's response is incorrect.

**NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH**

**F&A 2.1** Identifies and extends to specific cases a variety of patterns (linear and non-numeric) represented in models, tables, or sequences by extending the pattern to the next element, or finding a missing element (e.g., 2, 4, 6, \_\_, 10).

- 13** This table shows the number of vans needed to take students on a camping trip.

Number of Vans	Number of Students
2	14
3	21
4	28
5	?
6	42

Each van takes the same number of students. How many students can 5 vans take on the camping trip?

**Scoring Guide**

Score	Description
1	Student correctly determines the missing number in the pattern, <b>35</b> (students).
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 1  
(EXAMPLE A)

- 13 This table shows the number of vans needed to take students on a camping trip.

Number of Vans	Number of Students
2	14
3	21
4	28
5	?
6	42

Each van takes the same number of students. How many students can 5 vans take on the camping trip?

(35) I skip count by 7's  
14, 21, 28, 35, 42. AND I got 35.

Student's response is correct. (An explanation is not required.)

Although student made a transcription error, the correct number of students is clearly indicated.

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 1  
(EXAMPLE B)

- 13 This table shows the number of vans needed to take students on a camping trip.

Number of Vans	Number of Students
2	14
3	21
4	28
5	?
6	42

Each van takes the same number of students. How many students can 5 vans take on the camping trip?

The student has circled the number 35. To the right of the circle, they have written a multiplication problem: 7 times 5 equals 35, with a horizontal line under the 5 in the second row.

Student's response is correct.  
(Showing work is not required.)



NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 0  
(EXAMPLE A)

- 13 This table shows the number of vans needed to take students on a camping trip.

Number of Vans	Number of Students
2	14
3	21
4	28
5	29
6	42

Each van takes the same number of students. How many students can 5 vans take on the camping trip?

Student's response is incorrect.

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 0  
(EXAMPLE B)

- 13 This table shows the number of vans needed to take students on a camping trip.

Number of Vans	Number of Students
2	14
3	21
4	28
5	?
6	42

Each van takes the same number of students. How many students can 5 vans take on the camping trip?

each Van can take 14 Students.

14

Student's response is incorrect.

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

**N&O 2.2** Demonstrates understanding of the relative magnitude of numbers from 0 to 199 by ordering whole numbers; by comparing whole numbers to each other or to benchmark whole numbers (10, 25, 50, 75, 100, 125, 150, or 175); by demonstrating an understanding of the relation of inequality when comparing whole numbers by using “1 more”, “1 less”, “10 more”, “10 less”, “100 more”, or “100 less”; or by connecting number words and numerals to the quantities they represent using models, number lines, or explanations.



- 14 The chart below shows the game scores for Paula, Cory, and Teresa.

**Game Scores**

Name	Game 1	Game 2	Game 3	Total Score
Paula	4	6	8	18
Cory	9	5	5	
Teresa	5	7		

- a. What is Cory’s total score?
- b. Teresa’s **total** score was greatest. What is the lowest score Teresa could have for **game 3**?

**NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH**

**Scoring Guide**

<b>Score</b>	<b>Description</b>
<b>2</b>	Student has correct answer in part a, <b>19</b> , and part b, <b>8</b> .
<b>1</b>	Student has correct answer in part a. OR Student has correct answer in part b based on incorrect answer in part a.
<b>0</b>	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
<b>Blank</b>	No response

**Note:** In part b, accept any number greater than 7 and less than or equal to 8.

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 2  
(EXAMPLE A)



- 14 The chart below shows the game scores for Paula, Cory, and Teresa.

Game Scores

Name	Game 1	Game 2	Game 3	Total Score
Paula	4	6	8	18
Cory	9	5	5	
Teresa	5	7		

- a. What is Cory's total score?

$$\begin{array}{r} 9 \\ 5 \\ 5 \\ + 5 \\ \hline 19 \end{array}$$

a) Student's answer is correct.  
(Showing work is not required.)  
(1 point)

- b. Teresa's **total** score was greatest. What is the lowest score Teresa could have for **game 3**?

$$\begin{array}{r} 12 \\ \boxed{8} \\ + 8 \\ \hline 20 \end{array}$$

b) Student's answer is correct.  
(Showing work is not required.)  
(1 point)

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 2  
(EXAMPLE B)



- 14 The chart below shows the game scores for Paula, Cory, and Teresa.

**Game Scores**

Name	Game 1	Game 2	Game 3	Total Score
Paula	4	6	8	18
Cory	9	5	5	19
Teresa	5	7	8	20

- a. What is Cory's total score?

a) Student's answer is correct.  
(1 point)

- b. Teresa's **total** score was greatest. What is the lowest score Teresa could have for **game 3**?

b) Student's answer is correct.  
(1 point)

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 1  
(EXAMPLE A)



- 14 The chart below shows the game scores for Paula, Cory, and Teresa.

**Game Scores**

Name	Game 1	Game 2	Game 3	Total Score
Paula	4	6	8	18
Cory	9	5	5	19
Teresa	5	7	12	20

- a. What is Cory's total score?

19

a) Student's answer is correct.  
(1 point)

- b. Teresa's **total** score was greatest. What is the lowest score Teresa could have for **game 3**?

20

b) It is not clear which score student intends as the answer to the question, but in either case the answer is incorrect. (0 points)

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 1  
(EXAMPLE B)



- 14 The chart below shows the game scores for Paula, Cory, and Teresa.

**Game Scores**

Name	Game 1	Game 2	Game 3	Total Score
Paula	4	6	8	18
Cory	9	5	5	19
Teresa	5	7	5	17

- a. What is Cory's total score?

a) Student's answer is correct. (1 point)

- b. Teresa's **total** score was greatest. What is the lowest score Teresa could have for **game 3**?

5

b) Student's answer is incorrect. (0 points)



NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 0  
(EXAMPLE A)



- 14 The chart below shows the game scores for Paula, Cory, and Teresa.

**Game Scores**

Name	Game 1	Game 2	Game 3	Total Score
Paula	4	6	8	18
Cory	9	5	5	
Teresa	5	7		

- a. What is Cory's total score?

80 I know  
that because I counted  
18 and then I looked for  
the second one and the  
third one ...

a) Student's answer is incorrect.  
(0 points)

- b. Teresa's **total** score was greatest. What is the lowest score Teresa could have for **game 3**?

13 I know that  
because 8 plus 5 equals  
13.

b) Student's answer is incorrect.  
(0 points)

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 0  
(EXAMPLE B)



- 14 The chart below shows the game scores for Paula, Cory, and Teresa.

Game Scores

Name	Game 1	Game 2	Game 3	Total Score
Paula	4	6	8	18
Cory	9	5	5	
Teresa	5	7		

- a. What is Cory's total score?

25 is his score.

$$\begin{array}{r} 25 \\ + 5 \\ \hline 25 \end{array}$$

a) Student's answer is incorrect.  
(0 points)

- b. Teresa's **total** score was greatest. What is the lowest score Teresa could have for **game 3**?

12 is her score.

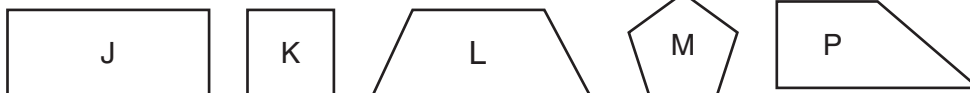
$$\begin{array}{r} 5 \\ + 7 \\ \hline 12 \end{array}$$

b) Student's answer is incorrect.  
(0 points)

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

**G&M 2.1** Uses properties, attributes, composition, or decomposition to sort or classify polygons or objects by a combination of two or more non-measurable or measurable attributes.

- 15 Look at these shapes.



- a. Sort these shapes into two sets. Put the letters or draw the shapes in the chart below.

Set 1	Set 2

- b. Use math words to tell how you sorted the shapes.

**NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH**

**Scoring Guide**

<b>Score</b>	<b>Description</b>
<b>2</b>	Student correctly sorts all 5 shapes and uses math words to correctly describe the sort.
<b>1</b>	Student uses math words to correctly classify three or four figures, with at least 1 correct figure in each set. OR Student provides a clearly correct sort with vague classification.
<b>0</b>	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
<b>Blank</b>	No response

**Sample Response:**

Figures J and K are rectangles and figures L, M, and P are not rectangles.

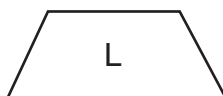
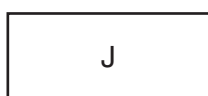
**Notes:**

- Student may draw figures in the correct column or list the letters of the figures in the correct column.
- Vague wording may include: big/small, long/short, or slanted/straight.

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 2  
(EXAMPLE A)

- 15 Look at these shapes.



- a. Sort these shapes into two sets. Put the letters or draw the shapes in the chart below.

Set 1	Set 2
J K L P	M

- b. Use math words to tell how you sorted the shapes.

J, K, L, & P all Have 4 corners  
& 4 sides M has 5 corners &  
5 sides

Student correctly sorts all shapes into two sets with sufficient description of the criteria for sorting. (2 points)

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 2  
(EXAMPLE B)

- 15 Look at these shapes.



- a. Sort these shapes into two sets. Put the letters or draw the shapes in the chart below.

Set 1	Set 2
JK	Lmp

- b. Use math words to tell how you sorted the shapes.

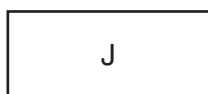
I put the rectagle together

Student correctly sorts all shapes into two sets with sufficient description of the criteria for sorting. (2 points)

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 1  
(EXAMPLE A)

- 15 Look at these shapes.



- a. Sort these shapes into two sets. Put the letters or draw the shapes in the chart below.

Set 1	Set 2
J K L	M P

- b. Use math words to tell how you sorted the shapes.

J, K, L all hav 4 corners  
the rest don't

Student correctly sorts four out of  
the five shapes based on sufficient  
description of the criteria for sorting.  
(1 point)

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 0  
(EXAMPLE A)

- 15 Look at these shapes.



- a. Sort these shapes into two sets. Put the letters or draw the shapes in the chart below.

Set 1	Set 2

- b. Use math words to tell how you sorted the shapes.

by alphabetical order

Student's criteria for sorting is irrelevant to the concept being measured. (0 points)













**NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH**

**DSP 2.1** **Interprets a given representation** (pictographs with one-to-one correspondence, line plots, tally charts, or tables) to answer questions related to the data, or to analyze the data to formulate conclusions. (IMPORTANT: *Analyzes data consistent with concepts and skills in M(DSP)–2–2.*)

- 16** Look at this pictograph.

**Dogs at the Park**

Type of Dog	Number of Dogs
Beagle	 
Collie	  
Poodle	
Dalmatian	   

 <b>Key</b> represents 1 dog
---

- a. Write a word problem that can be answered using the information in this pictograph.
  
  
  
  
  
  
  
  
  
  
- b. Answer the word problem you wrote.

**NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH**

**Scoring Guide**

<b>Score</b>	<b>Description</b>
<b>2</b>	Student writes an appropriate word problem in part a and answers it correctly in part b.
<b>1</b>	Student writes an appropriate word problem in part a.
<b>0</b>	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
<b>Blank</b>	No response

**Sample Responses:**

How many dogs are at the park? 10











How many more collies than beagles are at the park? 1

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 2  
(EXAMPLE A)

- 16 Look at this pictograph.

**Dogs at the Park**

Type of Dog	Number of Dogs
Beagle	 
Collie	  
Poodle	
Dalmatian	   

**Key**  
 represents 1 dog

- a. Write a word problem that can be answered using the information in this pictograph.

If you were to put all the Collies and Beagles together would it be the same number of dogs, if you were to put all the Dalmatians and Poodle together and if so how many.

a) Student writes an appropriate word problem.  
(1 point)

- b. Answer the word problem you wrote.

Yes 5.











b) Student gives a correct answer to the word problem.  
(1 point)

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 2  
(EXAMPLE B)

- 16 Look at this pictograph.

**Dogs at the Park**

Type of Dog	Number of Dogs
Beagle	 
Collie	  
Poodle	
Dalmatian	   

**Key**  
 represents 1 dog

- a. Write a word problem that can be answered using the information in this pictograph.

How many collie  
are there.

a) Student writes an  
appropriate word problem.  
(1 point)

- b. Answer the word problem you wrote.

There are three  
collie.











b) Student gives a correct  
answer to the word problem.  
(1 point)

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 1  
(EXAMPLE A)

- 16 Look at this pictograph.

**Dogs at the Park**

Type of Dog	Number of Dogs
Beagle	 
Collie	  
Poodle	
Dalmatian	   

**Key**  
 represents 1 dog

- a. Write a word problem that can be answered using the information in this pictograph.

Dalmatian has more than Beagle  
how much more.

a) Student writes an appropriate word problem.  
(1 point)

- b. Answer the word problem you wrote.

6 more than Beagle.











b) Student's answer to the word problem is incorrect.  
(0 points)

NECAP 2007 RELEASED ITEMS  
GRADE 3 MATH

SCORE POINT 0  
(EXAMPLE A)

- 16 Look at this pictograph.

**Dogs at the Park**

Type of Dog	Number of Dogs
Beagle	 
Collie	  
Poodle	
Dalmatian	   

**Key**  
 represents 1 dog

- a. Write a word problem that can be answered using the information in this pictograph.

What are they doing in the park?

- b. Answer the word problem you wrote.

They are playing in the park.

Student's word problem and answer are irrelevant to the skill or concept being measured. (0 points)